

# The Monroe Beach House

An outstanding LEED certified home that offers all the fun and beauty of being on Lake Michigan, yet all the conveniences of being within walking distance to downtown South Haven – who could ask for more? As Cottage Home’s latest model of sustainability and efficiency, this modern beach home serves as a great showcase of LEED building techniques and features.

Constructing the house on a previously developed site and building it in conjunction with the home next door allowed us to be extremely resourceful and thoughtful in material and labor planning. Inside is a high efficiency boiler system for radiant heat and domestic hot water. All of the hot water piping is insulated and high efficiency toilets and faucets were installed. Electrically speaking, CFL and LED light fixtures were used, as well as bath fan timers and occupancy sensors for lights.

Because it was built as a Cottage Home model, we furnished the home with products manufactured by companies who endorse and encourage green practices in the production and use of materials, many of whom use organic fabric. We also had some fun with the specifications and included recycled glass shower tiles and a pebble stone shower floor, as well as a non-catalytic, clean burning and efficient Scan wood stove on the four season lake porch.

One of the homes included in Cottage Home’s most recent Blue Green Gala, where over \$21,000 was raised for South Haven’s Michigan Maritime Museum, this idyllic beach house has helped to raise awareness, as well as the bar, for environmentally conscious building in our community.

## LEED™ Facts

### LEED for Homes

Certification Awarded: August, 2009

**Gold** **96.5\***

Innovation in Design **5.5/11**

Location & Linkages **7/10**

Sustainable Sites **14/22**

Water Efficiency **12/15**

Energy & Atmosphere **24.5/38**

Materials & Resources **12.5/16**

Indoor Environmental Quality **19/21**

Awareness & Education **2/3**

\*Out of 136 possible points.

Based on the home size adjustment factor, the point total thresholds for certification for this home were:

Certified: 57.0	Gold: 87.0
Silver: 72.0	Platinum: 102.0



# Key LEED Features



## Energy & Atmosphere

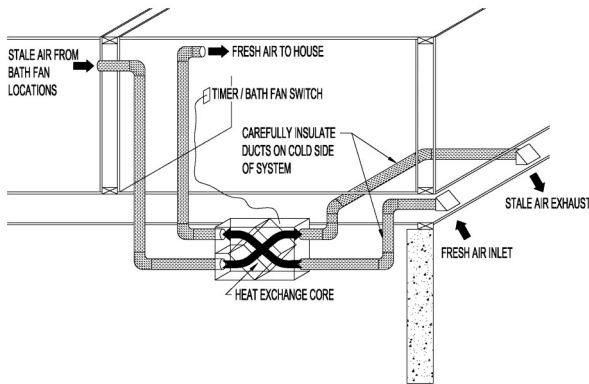
Highly efficient boilers serve the radiant heat and provide capacity to heat the pool in the summer, and snow melt around the hot tub in the winter.



## Indoor Environmental Quality

Use of an ERV system to supply fresh air and serve as the bath fan ventilation.

**HRV DIAGRAM**  
(HEAT RECOVERY VENTILATOR)



A heat recovery ventilator continuously exhausts stale, polluted indoor air, and replaces it with fresh outdoor air. At the same time, energy from the indoor air (warm air in winter, cool air in summer) is extracted and transferred to the fresh incoming air so there is very little energy loss.



HRV UNIT

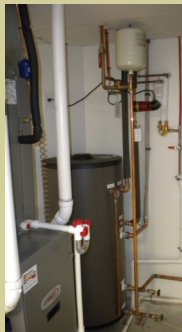


HRV PROGRAMMABLE TIMER

## HYDRONIC PIPING



RADIANT POOL HEATER



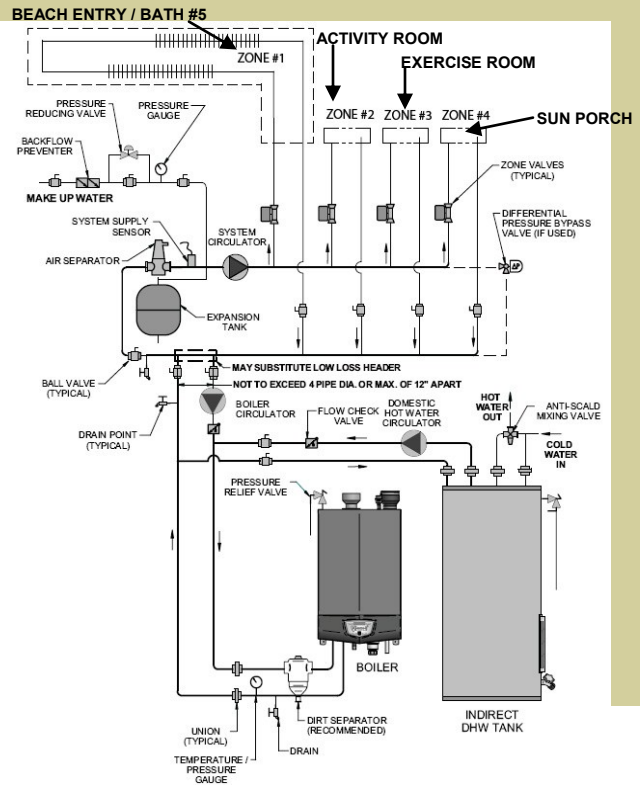
DOMESTIC HOT WATER



ZONES #1-#3  
(BASEMENT)



ZONE #4  
(SUN PORCH)



Designers & Builders of  
Well-Appointed Beach Houses & Cottages